4.0 WORLD WIDE WEB

The Web allows the user to easily download files of any type regardless of whether they contain formatting or graphical characters. The Web uses client/server architecture. The servers are storage areas for files; the clients are the browsers that, when connected server, are used to view the files.

Within the GCCS environment, each command center has a server with its own home page that has links to other command centers, including links to special interests. Files are maintained on the servers in binary format. Using a browser, the user connects to a server and specifies a file. The file can be downloaded or viewed, listened to, saved to a file, or printed.

Two Web browsers have been segmented for GCCS:

- Netscape, which is a commercial off-the-shelf (COTS) product.
- Mosaic, which is public domain software.

Netscape is the recommended package for viewing files on the Web. Two Web servers have been segmented. Figure 4-1 shows the relationship between the clients and servers.

NOTE: Both browsers are compatible with both servers.

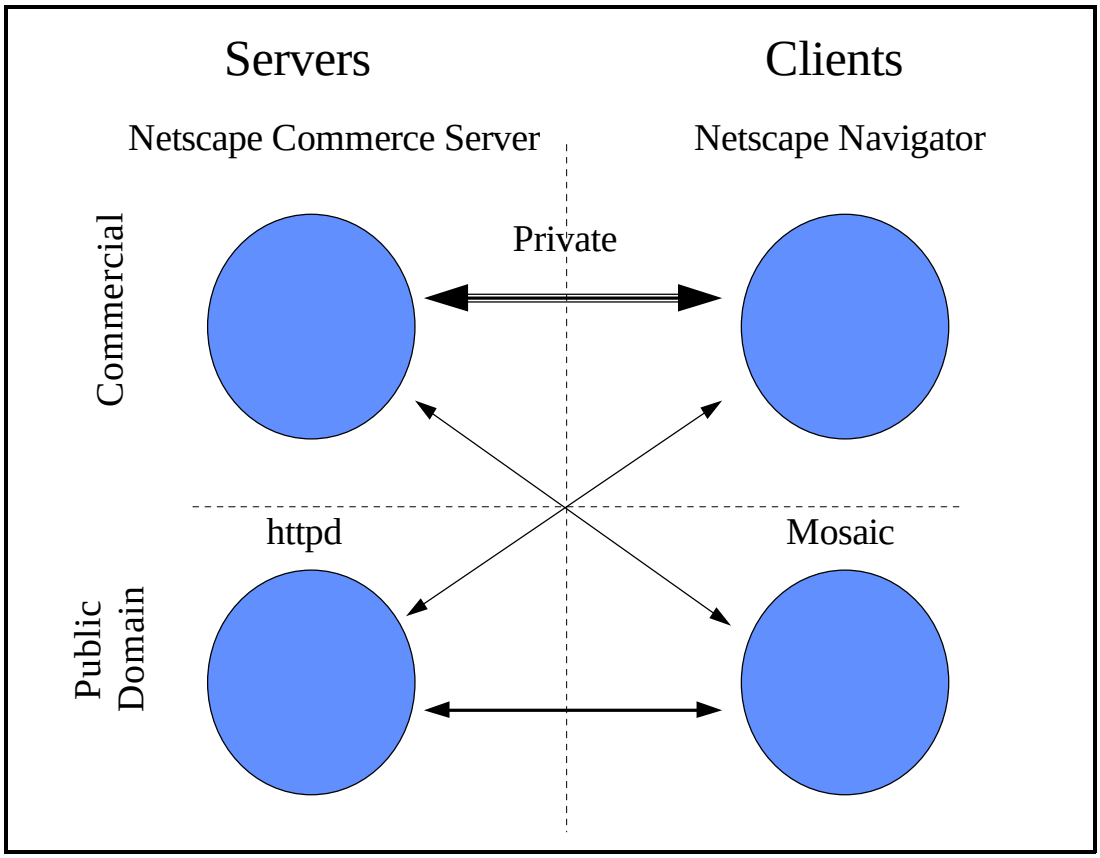

Figure 4-1. GCCS Web Servers and Clients

There are three ways to find a file on the Web:

- Browsing home pages on the Web.
- Follow embedded links.
- Know the Universal Resource Locator (URL).

You can browse GCCS site home pages on the Web using Netscape or Mosaic.

As the GCCS Web matures, sites will place pointers into their home pages allowing users to browse the Web by following links. A link is a word, phrase, or topic that, when you click on it, automatically downloads another document to which the link points. The most direct way to reach a file is to know the URL, which is a unique document address.

There are three components of a URL: the protocol used to access the document, the name or IP address of the machine that is serving the document (possibly accompanied by a port number), and the full path plus filename of the document on that server. For example, the URL of the GCCS logo stored on the OSF Web server is*http://trudel.osf.gcc.smil/icons/gccslogo.jpg*. Hypertext transfer protocol (http) is the protocol used to transfer the document; "trudel.osf.gcc.smil" is the name of the machine; and*/icons/gccslogo.jpg* is the name of the

document. Figure 4-2 shows an unclassified GCCS home being displayed using Netscape. The URL for this page is *http://164.117.208.50/* and is shown at the top of the screen.

Both Netscape and Mosaic display documents in a wide variety of formats, including hypertext markup language (html), text, and graphics (gif). They also have the ability to execute other programs for displaying files in other formats (e.g., postscript, mpeg, wav, etc). Both packages work in a similar manner. Once you have started the browser, select **open** to enter a known URL or, if viewing a document, click on links within the document to download other documents. There are options for saving downloaded documents to a file and for viewing local files through the browser (by specifying "file" as the protocol). The primary difference between the browsers is the Netscape data encryption; Mosaic does not currently have any encryption capabilities.

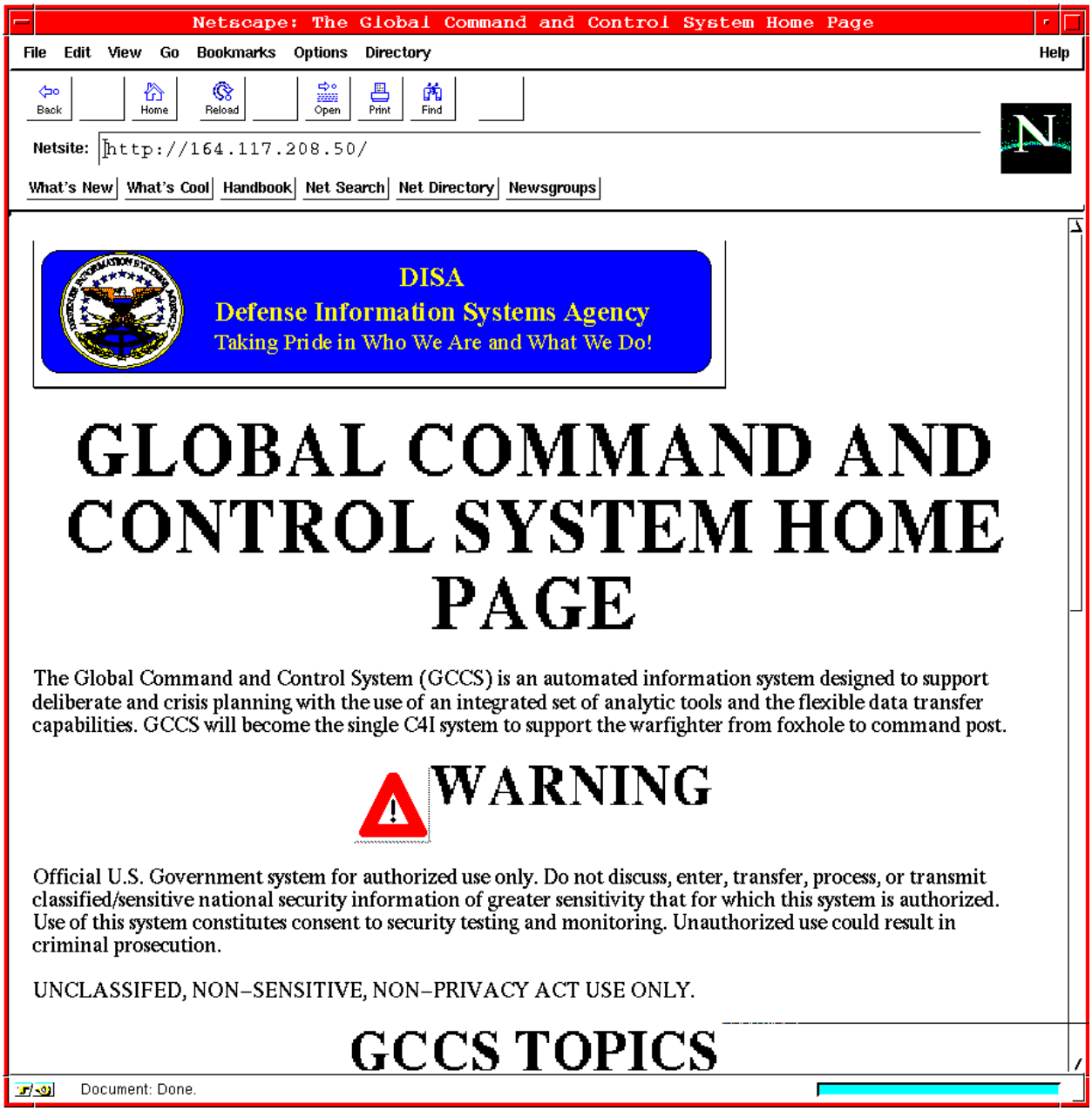

Figure 4-2. Netscape Navigator Displaying an Unclassified GCCS Home Page